

### ABSTRACT

A small sized structure for a plurality of resonance frequency bands in a PIFA antenna system for at least two mobile frequency bands distant from each other including a ground connection and a HF power supply connection. The PIFA antenna system includes at least two antenna branches which are disposed essentially side-by-side and in parallel to each other in the form of a strip and are connected to each other at a base thereof in order to serially connect the antenna branches which extend at a predetermined distance from each other, thereby forming a slit and are provide with straight segments for producing a capacitance coupling between the branches. The ground connection is preferably arranged at the free end of one of the antenna branches, the HF power supply connection is mounted on the external edge of the branch of the PIFA antenna structure provided with the ground connection. The width of the antenna branches, the length thereof and the slit therebetween are calculated in such a way that the PIFA antenna structure is provided with two resonance frequency bands arranged at a desired distance to each other.